cross the boundaries of landline LECs' local calling areas and, in many MTAs, state lines as well did not affect the Commission's conclusion that *all* intraMTA calls are local for purposes of reciprocal compensation between ILECs and CMRS providers.

In the situation at hand, the Internet itself is inherently jurisdictionally interstate. As a result, traffic to and from the Internet is also jurisdictionally interstate. Just as MTAs are a jurisdictionally federal "overlay" on existing landline local calling areas, so, too, is the Internet a jurisdictionally federal overlay network. That overlay network manifests itself physically throughout the country (among other ways) in the form of ISP points of presence. These points of presence constitute the physical locations used to establish links between the packet-switched Internet and the circuit-switched public telephone network. It is perfectly reasonable to view those points of contact as the end points of circuit-switched calls to the Internet, both for purposes of terminating compensation and otherwise. Moreover, the inherently federal nature of the Internet, and the inherently interstate nature of calls to the Internet, confirms that the Commission, not the 50-plus regulatory bodies in the states, territories, and the District of Columbia, is the regulator with the authority to determine which calls to the Internet are "local" for purposes of Sections 251(b)(5) and 252(d)(2) of the Act.

The remainder of these comments are organized as follows. Section II explains why it is anticompetitive to exempt calls ILEC end users make to the Internet from terminating compensation obligations. Section III explains why, in any event, the ILECs' position is inconsistent with applicable Commission precedent and relevant provisions of the Communications Act. Finally, Section IV explains that, far from supporting the ILECs' position, the inherently interstate nature of the Internet provides a sound jurisdictional basis for a ruling that circuit-switched calls to the Internet are to be treated as local for purposes of payment of terminating compensation under Section 251(b)(5) and Section 252(d)(2) of the Act.

⁹ Congress has defined "the Internet" to be "the international computer network of both Federal and non-Federal interoperable packet switched data networks." 47 U.S.C. § 230(e)(1). It is hard to imagine how an "international," "interoperable" computer "network" could be under state or local regulatory jurisdiction.

II. DENIAL OF TERMINATING COMPENSATION FOR CALLS TO THE INTERNET WOULD HAVE PROFOUND ANTICOMPETITIVE EFFECTS ON CLECs AND ISPs.

The basic logic of reciprocal compensation is that each LEC collects-from its own end users the costs of terminating the calls that those end users make. If one end user calls another on the same LEC's network, then the end user revenue is received by the same LEC that incurs the costs of terminating the call. But if the called party is on a different LEC's network, that LEC has no relationship with the calling party. The only way that the LEC serving the called party can be compensated for the costs of terminating calls originating on another LEC's network is by receiving terminating compensation payments from the other LEC.¹⁰

If an ILEC were exempt from the obligation to pay terminating compensation to CLECs, that ILEC would receive a totally unjustified windfall. This is because, as CLECs obtain the business of end user customers, those customers drop off of the ILEC's network. As a result, the ILEC experiences a reduction in its costs directly proportional to the amount of terminating traffic the lost customers receive. In addition to avoiding the variable costs of terminating calls, the ILEC's switches will experience less usage, so switch growth and replacement can be deferred. Moreover, once a CLEC obtains an initial minimum level of customers, the ILEC can establish efficient trunking arrangements between its network and the CLEC's network. This will free up capacity in the ILEC's own inter-switch network, leading to deferral of the need to upgrade these inter-switch links.

The purpose of terminating compensation is to recognize that the functions that the ILEC no longer performs — reflected in the ILEC cost savings — are performed by the CLEC. Without terminating compensation, the ILEC would save the costs of terminating calls to the CLEC's customers, but would still collect revenues from its own end users. These are the

This is to be distinguished from the situation where an end user makes a long distance call. In that situation, both the interexchange carrier (IXC) and the originating LEC have direct billing relationships with the calling party. As a result, the IXC is able to recover its costs — including access charges at both ends of the call — from the party making the call.

same revenues that — prior to the arrival of the CLEC — the ILEC viewed as sufficient to cover its call termination costs. Yet the CLEC would have no source of revenues to cover the costs of terminating calls to its end users, other than the end users themselves. This would force the CLEC to increase its charges to its end users, because these end user charges would have to cover the costs of both call origination and call termination as well.

For these reasons, the reciprocal compensation obligation contained in Sections 251(b)(5) and 252(d)(2) of the Act is an essential part of Congress's effort to open up the local exchange market to meaningful competition.¹¹ If a CLEC was not entitled to compensation for calls the ILEC's end users make to the CLEC's end users, the CLEC would be forced to charge higher prices and would be unable to penetrate the market effectively, or, perhaps, at all.¹²

This basic economic logic applies not only to the local exchange market in general, but to any particular class of customers within that market. If CLECs were not entitled to terminating compensation for calls to taxicab dispatch companies, CLECs would be unable to serve such companies economically. If CLECs were not entitled to terminating compensation for calls to government agencies, they would not be able to serve such agencies economically.¹³ Consequently, if a CLEC is not entitled to receive terminating compensation for calls to ISPs,

The basic purpose of the Telecommunications Act of 1996 was to establish a "procompetitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition." Joint Manager's Statement, S. Conf. Rep. 104-230, 104th Cong., 2d Sess. I (1996) (emphasis added).

This is not to say that in a number of situations the best form of reciprocal terminating compensation would not be a "bill-and-keep" system, in which the ILEC's and CLEC's terminating compensation obligations are assumed to net out to zero. Congress expressly recognized that "bill-and-keep" was an acceptable form of reciprocal compensation, see 47 U.S.C. § 252(d)(2)(B)(ii), although the Commission concluded that it would not mandate the use of bill-and-keep over the objections of one of the interconnecting carriers. Local Competition Order at ¶¶ 1096-1118.

¹³ Indeed, without terminating compensation, the only types of customers that CLECs could profitably serve would be customers who use their local exchange service exclusively for outgoing calls. Only for these (hypothetical) customers would the CLEC experience no uncompensated call termination costs.

then the CLEC will not be able to serve ISPs economically. Once the ISP has disconnected its dial-up lines from the ILEC's end office switch, the ILEC would be relieved of many of the costs it previously incurred in terminating calls to the ISP Instead, the CLEC would incur those costs as it switches calls from the ILEC's end users to the ISP's diai-in lines. The ILEC would continue to receive the same revenues from its end users as before. But the CLEC would receive no compensation for completing calls to the ISP. The only way to recover those costs, therefore, would be to increase its charges, either to its end users generally or to ISPs in particular. In either case, the CLEC's ability to compete would be severely harmed.¹⁴

The costs of terminating calls to ISPs — as with taxicab dispatch companies, pizza delivery services, and other customers who use their local exchange services exclusively or predominantly to receive calls — are substantial. As a result, the denial of terminating compensation for calls to ISPs would give CLECs a strong disincentive to compete for the business of such customers in the first place. Without terminating compensation, therefore, the only firms that will be able to provide local exchange service to ISPs will be the ILECs. In other words, the effect of accepting the ILECs' view that calls from their end users to the Internet are not subject to terminating compensation would be to allow the ILECs to re-monopolize the market for connections between the Internet and the public switched network.¹⁵

¹⁴ See ALTS Letter at 7 n.10.

The ILECs have claimed that they incur substantial costs in terminating calls to ISPs on their own networks. See, e.g., Joint Comments of Bell Atlantic and NYNEX on Notice of Inquiry, In the Matter of Usage of the Public Switched Network by Information Service and Internet Access Providers, CC Docket No. 96-263 (filed March 27, 1997) ("BA/NYNEX Internet NOI Comments") at 4, 6. This claim only emphasizes the need for terminating compensation as between ILECs and CLECs for calls to ISPs. If the costs of serving ISPs are so substantial, then the cost savings achieved by the ILECs, and the new costs incurred by the CLECs when the ISP switches carriers, are equally substantial. This creates a particularly strong need for terminating compensation payments. Of course, the Commission was not persuaded by claims that ILECs experience substantial uncompensated costs from serving ISPs, when all relevant revenues (e.g., revenues from end users' purchases of second lines used to reach the Internet) are taken into account. See Access Charge Order at ¶ 347. See also C. Ferguson, "The Internet, Economic Growth and Telecommunications Policy" (April 14, 1996), available at http://www-eecs.mit.edu:80/people/ferguson/telecom (debunking (continued...)

There is no conceivable reason to deprive ISPs of competitive choices in obtaining circuit-switched connections to the public switched network. To the contrary, Congress has stated that the basic purpose of the Telecommunications Act of 1996 is to establish a "procompetitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition." It would make no sense to interpret Sections 251(b)(5) and 252(d)(2) of the Act to eliminate competition for the business of ISPs. Yet this is the inevitable result of accepting the ILECs' argument.

Indeed, such a result would be particularly inappropriate in light of Congress's specific decision that it "is the policy of the United States ... to promote the continued development of the Internet and other interactive computer services and other interactive media."¹⁷ Interpreting Sections 251(b)(5) and 252(d)(2) so as to deprive ISPs of all meaningful competitive choices for their links to the public switched network would directly frustrate that policy.

The anticompetitive impact of the ILECs' proposed treatment of calls to ISPs is compounded by the fact that many major ILECs are pursuing entry into the business of providing dial-up access to the Internet. Ameritech, Bell Atlantic, BellSouth, Pacific Bell, and Southwestern Bell, among other ILECs, have all launched consumer-oriented dial-up Internet

^{15(...}continued)

claims that, on balance, the Internet imposes uncompensated costs on ILECs). The Commission's skepticism regarding ILEC claims of "uncompensated" costs indicates that the ILECs will not be unfairly disadvantaged by paying terminating compensation for the calls their end users make to the Internet.

Joint Manager's Statement, S. Conf. Rep. 104-230, 104th Cong., 2d Sess. 1 (1996) (emphasis added).

¹⁷ 47 U.S.C. § 230(b)(1).

access operations.¹⁸ It would be quite bizarre for the Bureau to rule that existing ISPs must be forced to obtain their essential links to the public network from large, aggressive, well-financed competitors in the Internet access business when any number of competing LECs are available to serve them. Yet that would be the result of accepting the ILECs' claims that they do not need to pay terminating compensation for calls to ISPs served by CLECs.¹⁹

Adopting a regulatory regime that would, in effect, force ISPs to obtain dial-up connections to the public switched network from ILECs would be particularly ironic in light of the fact that there will likely be network efficiency gains from transferring ISP dial-in lines from ILECs to CLECs. According to the ILECs, part of the reason they experience such high costs in serving ISPs is that they have not engineered their switches with the characteristics of ISP traffic in mind.²⁰ CLECs, whose networks are not as mature as those of the ILECs, can probably

Isn't the Internet a threat to telephone companies?

The Internet is a threat to any company that fails to take advantage of the opportunity the Internet affords.

FAQ available at http://public.pacbell.net/faq/general_faq.html. The ILECs' heavy investment in circuit-switched technology hinders their ability to "take advantage of the opportunit[ies]" of the Internet. CLECs, ISPs and others are not constrained in this way.

See, e.g., data at http://www.ameritech.net (Ameritech); http://www.bellatlantic.net (Bell Atlantic); http://www.bellsouth.net (BellSouth); http://www.swbell.net (Southwestern Bell); http://public.pacbell.net (Pacific Bell).

Despite their recent forays into Internet access, the ILECs are heavily invested in traditional circuit-switched technology, and can reasonably be expected to view the explosive growth of the Internet with alarm. Pacific Bell summed the matter up succinctly in its response to a "Frequently Asked Question." Pacific Bell states:

See, e.g., Comments by Pacific Telesis Group on the Notice of Inquiry, In the Matter of Usage of the Public Switched Network by Information Service and Internet Access Providers, CC Docket No. 96-263 (filed March 27, 1997) ("Pacific Telesis Internet NOI Comments") at 27 ("Heavy and unpredictable usage patterns of Internet traffic cause network congestion on the public switched network because local switching offices were not engineered for this type of traffic. They were engineered to accommodate the predictable usage patterns of voice traffic."); BA/NYNEX Internet NOI Comments at 7 ("Little of this unplanned investment would likely have been required if Internet usage had not substantially altered traditional traffic patterns.").

build ISP usage patterns into their switch planning much more easily than the ILECs have been able to retrofit their networks to accommodate burgeoning ISPs needs.²¹ Removing ISP lines from the ILECs' mis-engineered networks would give the ILECs a chance to consider how to configure their networks to meet society's ever-growing appetite for digital communications. If they can find a way to do so more efficiently than the CLECs, then they will win back ISPs as customers. If they cannot do so, then they will not, and should not, win back the ISPs.

In light of the significant anticompetitive consequences described above, the Bureau should reject the conclusion that calls to ISPs are not subject to reciprocal compensation, unless that conclusion is directly compelled by the Communications Act itself, or by an unambiguous Commission decision interpreting it. Only in the face of such a binding and unequivocal legal rule should the Bureau even consider accepting the ILECs' claim. In fact, however, as described in Section III, the ILECs' position is contrary to the Act and to all relevant Commission precedent.

See Pacific Telesis Internet NOI Comments at 31, 34 (noting costs to try to retrofit network to accommodate Internet usage); BA/NYNEX Internet NOI Comments at 4, 6 (same).

- III. DENIAL OF TERMINATING COMPENSATION FOR CALLS TO THE INTERNET IS CONTRARY TO COMMISSION PRECEDENT AND THE COMMUNICATIONS ACT.
 - A. Requiring Terminating Compensation For Calls To The Internet Is The Only Way To Harmonize The Access Charge Order, The Universal Service Order, And The Local Competition Order Regarding Treatment Of ISPs.

For the last fourteen years, ESPs (a group which now includes ISPs) have been treated as end users when they purchase dial-in lines for their subscribers to access their services. The Commission recently reaffirmed that this is the correct policy choice.²² The logical corollary to this holding is that ISPs are also end users for other purposes and that, therefore, calls to ISPs are subject to reciprocal compensation just like calls to other end users.

The ILECs' main stated reason for objecting to this conclusion appears to be that traffic sent to the Internet is jurisdictionally interstate and, therefore, cannot reasonably be treated as "local."²³ This argument, however, ignores the fundamental logic of the Commission's access charge decisions. From the beginning, the ESP "exemption" has been premised on the assumption that the traffic sent between end users and ESPs is jurisdictionally interstate. If the traffic were not interstate, there would have been no need for an "exemption" in the first place, because interstate access charges could not lawfully have been applied.

In other words, the entire point of the Commission's policy has been that, *despite* the fact that traffic flowing between end users and ESPs is jurisdictionally interstate, both that traffic and the exchange facilities used to carry it should be treated as local for regulatory purposes. The fact that traffic between end users and the Internet is jurisdictionally interstate, therefore, no more precludes the availability of terminating compensation under Sections

²² Access Charge Order at ¶¶ 341-48.

²³ See ALTS Letter at 4-6 and attached letters from NYNEX and Southwestern Bell. See also BA/NYNEX NOI Comments at 13-15.

251(b)(5) and 252(d)(2) than that fact requires the assessment of interstate access charges under Sections 201 and 202.²⁴ Indeed, as described below, the only way to harmonize the treatment of ISPs and the Internet generally in the *Local Interconnection Order*, the *Universal Service Order*, and the Access Charge Order is to require that terminating compensation be paid with respect to calls to the Internet that are otherwise "local" in nature.

In the proceedings leading to *Access Charge Order*, the ILECs argued that it was essential to impose access charges on ISPs because heavy incoming call volumes to ISPs resulted in unreasonable network congestion for the ILECs. as well as significant uncompensated costs. The Commission specifically rejected these arguments. In doing so, the Commission recognized that its regulatory policies regarding ISPs and the Internet affected the ability to fulfill Congress's desire to "preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation." Moreover, the Commission had previously recognized that the existing regulatory framework was designed for a circuit-switched network, not the packet-switched Internet. In light of these considerations, the Commission specifically found that "ISPs should remain classified as end users" in the context of the access charge system.

In the *Universal Service Order*, the Commission faced the problem of determining whether ISPs should be required to make contributions to the new universal service funding

²⁴ See ESP Exemption Order at ¶¶ 13, 19.

²⁵ Id. at ¶ 344, citing 47 U.S.C. § 230(b)(2).

[&]quot;The mere fact that providers of information services use incumbent LEC networks to receive calls from their customers does not mean that such providers should be subject to an interstate regulatory system designed for *circuit-switched* interexchange voice telephony." In the Matter of Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers, Transport Rate Structure and Pricing, and End User Common Line Charges, *Notice of Proposed Rulemaking*, CC Docket Nos. 96-282 *et al.*, (released December 24, 1996) ("Access Charge NPRM") at ¶ 288 (emphasis added)..

²⁷ Access Charge Order at ¶348.

mechanism to be established under Section 254(d) of the Act. The issue arose because of the clear mandate of Section 254(h)(2)(A) that schools and libraries would be able to receive support from the new universal service fund for "information services," which both the Joint Board and the Commission interpreted to include Internet access. Here again, the Commission saw the distinction between the circuit-switched public telephone network and the packet-switched Internet to be significant. The Commission held that it is reasonable to distinguish between circuit-switched telephone calls to ISPs (which are "telecommunications") and the packet-switched Internet transactions that ISPs facilitate (which are not "telecommunications"):

We observe that ISPs alter the format of information through computer processing applications such as protocol conversion and interaction with stored data, while the statutory definition of telecommunications only includes transmissions that do not alter the form or content of the information sent. When a subscriber obtains a connection to an Internet service provider *via voice grade access to the public switched network*, that connection is a telecommunications service and *is distinguishable from* the Internet service provider's offering.¹⁸

This conclusion is totally consistent with the Access Charge Order. Indeed, it would have been odd to treat ISPs as end users (i.e., not carriers) for purposes of access charges, yet treat them as providers of telecommunications services (i.e., carriers) for purposes of contributions to the universal service fund.

Finally, in the Local Competition Order, the Commission faced the question of whether ISPs would have the right to directly connect their networks to the networks of incumbent LECs under the provisions of Sections 251(b) and 251(c) of the Act. Here again, the Commission rejected the invitation to treat ISPs as "carriers." While it recognized that some ISPs may also be carriers (in regard to some of their operations), nothing about being an ISP per se compelled the conclusion that ISPs were carriers entitled to direct interconnection with ILECs.²⁹

²⁸ Universal Service Order at ¶ 789.

²⁹ Local Competition Order at ¶ 995.

In these three rulings, the Commission has established that ISPs are to be treated as end users for purposes of Sections 201 and 202 of the Act (access charges); that ISPs are not carriers for purposes of Sections 251(b) and (c) (interconnection); and that ISPs do not provide telecommunications services for purposes of Section 254(d) (universal service) when they provide access to the Internet.³⁰ The only possible ruling in the matter at hand that is consistent with these three prior Commission decisions is that ISPs served by CLECs are end users, not carriers, for purposes of terminating compensation under Section 251(b)(5) and Section 252(d)(2). As long as the individual end user and the ISP are in the same local calling area, therefore, terminating compensation is required.

B. Calls To The Internet Terminate At The ISP's Premises, Not At Other, Distant Locations.

The conclusion that calls to the Internet are subject to terminating compensation is directly consistent with, and buttressed by, the language of Section 252(d)(2). That section indicates that reciprocal compensation applies to "calls." Both elsewhere in Title II of the Communications Act and in common usage, the term "call" refers to a normal circuit-switched connection between two telephone numbers. From this perspective, as the Commission found

Moreover, as ALTS notes, the ILECs themselves treat calls to ISPs as local for other purposes as well, such as the interconnection arrangements between neighboring ILECs that exchange local traffic. See ALTS Letter at 7.

Section 252(d)(2)(A) sets minimum standards for reciprocal compensation arrangements under Section 251(b)(5). Section 252(d)(2)(A)(i) requires "mutual and reciprocal recovery" of the costs of "calls that originate on the network facilities of the other carrier." Section 252(d)(2)(A)(ii) requires that those costs be determined based on "a reasonable approximation of the additional costs of terminating such calls." Finally, Section 252(d)(2)(B)(ii) limits the authority of the Commission and state commissions "to require carriers to maintain records with respect to the additional costs of such calls." In light of this language, it is reasonable — if not mandatory — to determine the scope of LECs' reciprocal compensation obligations from the perspective of "calls" exchanged between them.

See, e.g., references to "calls," "called telephone numbers," and similar usage in 47 U.S.C. § 222(d)(3) (discussing telemarketing "calls"); § 223(a)(1) (discussing obscene or harassing "calls," and referring to the "called number"); § 223(b)(1)(A) (discussing obscene or harassing "calls"); (continued...)

in the *Universal Service Order*, a circuit-switched call to the Internet terminates at the ISP's premises, even though packet-switched transactions occur within the Internet as a result of signals sent on the circuit-switched call.

In other contexts, the Commission has also recognized that the notion of a "call" inherently involves a dedicated, *i.e.*, circuit-switched, connection between two locations. For example, as part of its effort to harmonize its traditional use of the term "enhanced services" with the term "information services" as now defined in Title II, the Commission considered whether "adjunct-to-basic" services should be treated as "information services" or as "telecommunications" for purposes of Section 272 of the Act. In concluding that "adjunct-to-basic" services would be classified as "telecommunications," the Commission explained: "Although [adjunct-to-basic] services may fall within the literal reading of the enhanced service definition, they facilitate *establishment of a basic transmission path* over which *a telephone call* may be completed, without altering the fundamental character of the telephone service."³³ It is absolutely clear that the packet-switched data transactions within the Internet never result in the "establishment of a basic transmission path" between the individual end user and any Internet host computer. Instead, the

^{32(...}continued)

^{§ 225(}d)(1)(D) (discussing "calls" to Telecommunications Relay Service); § 226, passim (repeated discussion of "calls" handled by operator service providers); § 227, passim, including, specifically: § 227(a)(1)(A) (referring to "telephone numbers to be called"); § 227(b)(1)(A) (referring to "calls" to "telephone lines" and "telephone numbers"); § 227(b)(2)(C) (same); § 227(c)(3)(G) (same); § 227(d)(3)(B) (referring to the "called party's line"); § 228, passim (referring to "pay-per-call" services); § 229 (referring to "call-identifying information" to be made available to law enforcement agencies); § 271(c)(2)(B)(vii)(III) (referring to "operator call completion services" as part of competitive checklist); § 271(c)(2)(B)(x) (referring to access to data bases needed for "call routing and completion"); § 271(j) (treating services where the "called party" can choose the IXC as in-region interLATA services); § 274(i)(7) (defining inbound telemarketing as marketing where the customer initiates "the call"); § 275(d) (referring to "calls received" by alarm service providers); § 276(b)(1)(A) (references to completed "calls" from pay phones).

In the Matter of Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as amended, First Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 96-149 (released December 24, 1996) ("Non-Accounting Safeguards Order") at ¶ 107.

"basic transmission path," and, therefore, the "call." exists only between the end user and the ISP's location.

In this respect, then, calks to the Internet are quite different from circuit-switched calls that begin and end in different states, but that may include an (arguably) separate local call as part of the end-to-end link. For this reason, the regulatory treatment (for purposes of Sections 251(b)(5) and 252(d)(2), and otherwise) of calls to the Internet can reasonably be distinguished from, e.g., interstate calls placed over a Feature Group A line (with a seemingly "local" call at the originating end) or by means of a "leaky PBX" (with a seemingly "local" call at the terminating end). These latter situations are simply complicated ways of establishing a circuit-switched connection between two telephone numbers, i.e., making a "call." In this regard, the Joint Commenters respectfully disagree with the analysis put forward by ALTS, which suggests that "calls to ISPs are identical to calls to leaky PBXs." The packet-switched data transactions that take place within the Internet are simply not "calls" under any normal definition of the term.

The ILECs' confusion regarding calls to the Internet may arise from an outdated concept of what ISPs do and how the Internet functions, as compared to more "traditional" ESP operations. Under the older "enhanced service provider" model current in the 1970s and early 1980s, a firm such as Dialog or Compuserve maintained a small number of powerful centralized computers, the capabilities of which were shared among users in a "time-sharing" operation. An end user could, conceptually, reach the computer and interact with it by making a long distance call. The ESP exemption, however, allowed the ESPs to internalize and minimize these telecommunications costs, and to provide technically improved service, by establishing interstate packet-switched private line networks between local points of presence and the central computer, without being subject to the non-cost-based, per-minute access charge regime.³⁵ Although the

ALTS Letter at 6 n.8.

³⁵ Cf. B. Leiner, V. Cerf, et al., "A Brief History of the Internet," unnumbered section titled "Origins of the Internet," 2d paragraph, http://www.isoc.org/internet-history. The authors observe that early experiments with computer networking showed "that the time-shared computers could work well (continued...)

access charge exemption was fully justified, even for traditional ESPs, one can understand why these firms' operations seemed to involve a large number of interstate calls to one or a few identifiable, central locations.³⁶

Unlike in the traditional ESP model, however, there is no "central computer" of the Internet. Instead, each computer connected to the Internet that contains data accessible to others on the Internet is, itself, part of the Internet.³⁷ Today there are literally millions of computers that comprise the Internet, spread out around the country and the world.³⁸ Once an individual end user has established a link to one of the thousands of specialized "routers" that will transmit data packets to and from computers on the Internet, the end user has access to "the Internet" itself, which is comprised of all of those computers as well as all of the links between them.³⁹

³⁵(...continued) together, running programs and retrieving data as necessary on the remote machine, but that the circuit-switched telephone system was totally inadequate for the job." (Emphasis added.)

³⁶ For an example of this type of confused thinking, see BA/NYNEX Internet NOI Comments at 14-15 (noting that "database ESP traffic ... tends to be interexchange, because most such ESPs operate centrally-located facilities that serve customers throughout the country.")

See J. Rickard, "The Internet — What Is It?" in the Boardwatch Internet Service Providers Directory (1997), available at http://www.boardwatch.com/isp/archit.htm. In the unnumbered section titled "Levels of Access," fifth paragraph, the author observes, "[e]ach time a small office leases a line from their office to an Internet Service Provider's point-of-presence, they have in fact extended the Internet by that number of linear feet." This publication has identified more than 3,600 separate ISPs in the United States, many of whom operate multiple points of presence in different local calling areas.

See, e.g., Reno v. ACLU, 521 U.S. ____, slip op. (June 26, 1997) at 2 ("The number of 'host' computers — those that store information and relay communications — increased from about 300 in 1981 to approximately 9,400,000 by the time of trial in 1996.")

Congress has defined "the Internet" to be "the international computer network of both Federal and non-Federal interoperable packet switched data networks." 47 U.S.C. § 230(e)(1). The Internet, therefore, includes not only the thousands of ISPs themselves, but also the computers on any interconnected "packet switched data network." This includes the millions of "host" computers referred to by the Supreme Court in Reno v. ACLU, as well as other computers and networks that (continued...)

In the old-style, mainframe-driven ESP arrangement, the "computers" that provided the "information service" were few in number and centrally located. Today, the Internet is the computer. In other words, the Internet itself, viewed as an integrated whole, is what provides information services. From this perspective, the Internet is located (among other places) everywhere that an ISP has a point of presence. Once the individual end user's call has reached any such "outpost" of the Internet within the public switched network, that call has reached its final destination.⁴⁰ The only remaining question for purposes of terminating compensation is

meet the statutory definition. In this regard, the precise boundaries of what computers, networks and/or information services are part of "the Internet" are difficult to define and are, in any case, in constant flux. For purposes of the matter at hand, however, it is absolutely clear that "the Internet," as defined in Section 230(e)(1) includes essentially all traditional dial-up ISPs, most (if not all) major on-line services that offer connections to the "Internet," and the millions of "host" computers that contain World Wide Web pages, handle e-mail, newsgroups, etc.

Indeed, it is only for this reason that the Bell companies are permitted to operate Internet access services at all, in advance of obtaining in-region interLATA authority under Section 271. Under the old, centralized enhanced services model, these services would be inherently interLATA in nature:

[&]quot;An interLATA transmission component is "necessary" to an interLATA information service if it must be used in order for the end-user to make use of the information service capability. For example, a BOC may provide data storage and retrieval services to customers throughout its service region, using one centralized computer data storage facility and dedicated interLATA transmission links that connect the end-user with the data storage facility. In this case, the dedicated interLATA transmission links are "necessary" to the BOC's provision of centralized, interLATA data storage and retrieval services.

Non-Accounting Safeguards Order at ¶ 115 n.264. Only because the Internet is inherently distributed and decentralized are the BOCs permitted to offer Internet access. Of course, the continuing restriction on BOC provision of interLATA services makes it necessary for a third party Internet access provider to technically connect the end user to Internet host computers located beyond the boundaries of the LATA in which the BOC/ISP's point of presence is located. This is because, in the unique context of the BOC interLATA restriction, the Commission is "concerned not with the manner in which the information service is used, but rather with the components of the service that are provided by the BOC." See id. at ¶ 117.

whether the ISP point of presence the individual end user has called is within that end user's local calling area.⁴¹

Though It Carries Jurisdictionally Interstate Traffic.

As noted above, the only possible ILEC argument against the conclusion that a "call" to the Internet terminates at the ISP's location is that, even though the ISPs purchase local telephone service like any other business user, calls made to an ISP cannot be "local" because the traffic carried on those calls is jurisdictionally interstate. As also noted above, the fact that traffic is interstate in nature has no bearing on whether the *call* carrying the traffic is "local" or not. To the contrary, the entire logic of the Commission's longstanding ESP "exemption" is that it is reasonable to treat ESPs as end users even though the calls they receive from their customers are jurisdictionally interstate.

A more recent example of this situation is the treatment of calls between a landline LEC and a Commercial Mobile Radio Service (CMRS) provider under Section 251(b)(5). In that situation, the Commission specifically ruled that calls that originate and terminate within the CMRS provider's Major Trading Area (MTA) are to be treated as "local" for purposes of reciprocal compensation, even though such calls typically cross the boundaries of landline LECs' local calling areas and, in many MTAs, state lines as well.⁴²

In this regard, some calls to the Internet are not presently treated as local. An end user may live so far from the nearest ISP point of presence that a dial-up call to that ISP is actually a toll call. Indeed, the fact that some health care providers are so far from the nearest ISP point of presence that calling the Internet results in toll charges was a point of concern that the Commission addressed in the *Universal Service Order. See id.* at ¶¶ 744-49. In those circumstances, Section 251(b)(5) compensation would not apply to a call from the distant end user served by an ILEC connecting to a particular ISP location served by a CLEC. Instead, the ILEC would charge its end user intraLATA toll charges, and the CLEC would, logically, collect intrastate access charges from the ILEC.

Local Competition Order at ¶ 1036. Another example of "local interstate" calling is presented by multi-state local calling areas (e.g., calls between Washington, D.C. and Arlington, Virginia) (continued...)

In light of the ILECs' apparent confusion surrounding this issue, the Joint Commenters agree with ALTS that the Bureau should clarify the meaning of Section 51.701 of the Commission's rules. Section 51.701(a) states that the rule relates to "reciprocal compensation for transport and termination of local telecommunications traffic between LECs and other telecommunications carriers." Of course, as discussed above, local calls often carry interstate traffic. When that occurs, the "interstate" traffic is also "local" traffic. Indeed, such a situation is dealt with in Section 51.701(b)(2), relating to "local" CMRS traffic, which, as noted above, can cross landline local calling area boundaries as well as state lines and still be "local." The Bureau should clarify that the terms "local traffic" and "interstate traffic" are not mutually exclusive and that, in the context of circuit-switched calls to ISPs, the interstate traffic is also "local" and subject to terminating compensation.

⁴²(...continued)

governed by the terms of Section 221(b) of the Act. As far as the Joint Commenters are aware, no ILEC has claimed that local calls that cross state lines are somehow exempt from the reciprocal compensation obligations of Sections 251(b)(5) and 252(d)(2).

IV. THE BUREAU HAS JURISDICTION TO RULE THAT LOCAL CALLS TO THE INTERNET ARE SUBJECT TO RECIPROCAL COMPENSATION UNDER SECTIONS 251(b)(5) AND 252(d)(2) OF THE ACT.

As noted in the ALTS Letter, the issue of whether terminating compensation applies to calls from an individual end user to the Internet has arisen in a number of individual state proceedings.⁴³ It appears that the states to have considered the issue thus far have reached the correct result. While this is reassuring with regard to the merits of the issue, the prospect that different states might reach different results is troubling from the broader perspective of consistent application of both the local competition provisions of the Telecommunications Act of 1996 and Congress's specific policies regarding promoting and encouraging the continued development of the Internet. The Joint Commenters, therefore, agree with ALTS that the Bureau should issue a ruling that calls to the Internet are "local" calls subject to reciprocal compensation as long as the individual end user and the ISP point of presence the end user calls are in the same landline local calling area.

As discussed above, there can be no question that the *traffic* carried on calls to and from the Internet is jurisdictionally interstate in nature. The signals sent from the end user to the Internet may be stored, packetized, reformatted, and otherwise manipulated by the ISP's servers and routers, but those signals in some sense continue on across state boundaries. Similarly, the information that flows back to end users from the Internet typically will have been stored on a host computer in a different state than the one in which the end user is located. Moreover, the basic statutory definition of the Internet — "the *international* computer network of both *Federal* and non-Federal interoperable packet switched data networks" — clearly indicates that the Internet itself is jurisdictionally interstate.⁴⁴

See ALTS Letter at 2 n.2.

To the extent that the Internet uses "telecommunications" links for its internal communications, those links are typically dedicated circuits between and among host computers, metropolitan area exchanges, and network access points. Under long-standing Commission rules, as long as 10% or more of the traffic on a dedicated circuit is jurisdictionally interstate, the entire circuit (continued...)

As a result, just as MTAs are a jurisdictionally federal "overlay" on existing landline local calling areas, so, too, is the Internet a jurisdictionally federal overlay network. For this reason, just as the Commission has the authority to require the interstate traffic carried on POTE lines between individual end users and ESPs to be treated as "local" for regulatory purposes, and just as the Commission has the authority to require interstate intraMTA traffic to be treated as "local" for reciprocal compensation purposes, the Commission also has the authority to require that calls from an individual end user to an ISP within a local calling area be treated as "local" for reciprocal compensation purposes as well. 45

The Bureau should issue just such a ruling. As indicated by ALTS, the ILECs' efforts to avoid paying terminating compensation for calls to the Internet is causing substantial uncertainty regarding the economic viability of CLECs competing for the business of ISPs. And, as noted above, this uncertainty, which harms both CLECs and ISPs, is being generated just as the ILECs themselves are trying to *become* dial-up ISPs. In these circumstances, a clear and binding ruling is also necessary to fulfill the Commission's duty to advance "the policy of the United States ... to promote the continued development of the Internet and other interactive computer services and other interactive media."

^{44(...}continued)

is viewed as jurisdictionally interstate. See 47 C.F.R. § 36.154(a). Because the data that flows through the Internet comes from around the country and, indeed, the world, it is certain that the telecommunications "pipes" used to connect the Internet's computers are under federal, as opposed to state, regulatory jurisdiction. Moreover, as ALTS observes, the Commission has unquestioned federal authority to pre-empt state-level regulation of enhanced services. See ALTS Letter at 1 n.1 (citing cases).

A requirement that this category of jurisdictionally *interstate* traffic be treated as "local" for purposes of the application of Sections 251(b)(5) and 252(d)(2) of the *federal* Telecommunications Act would not raise any concerns about trenching on state regulatory authority.

⁴⁶ See ALTS Letter at 2. The Commission itself has stated that "[w]e agree with ISPs that regulatory certainty and continuity benefit both large and small service providers." Non-Accounting Safeguards Order at ¶ 102.

⁴⁷ 47 U.S.C. § 230(b)(1).

In sum, the jurisdictionally interstate nature of the traffic flowing between individual end users and the Internet, the jurisdictionally interstate nature of the Internet itself, and the clear federal policy to encourage the development of the Internet, all provide a sound jurisdictional basis for a binding ruling from the Dureau regarding the HECs' duty to pay terminating compensation in connection with local calls from individual end users and the Internet.

V. CONCLUSION.

For the reasons stated above, the Bureau should issue a ruling clarifying that circuit-switched calls to the Internet are subject to compensation under Sections 251(b)(5) and 252(d)(2) of the Act and applicable sections of the Commission's rules, as long as the individual end user and the ISP are within the same local calling area. Any other conclusion would be contrary to the Commission's consistent holding that ISPs are not carriers, and should be treated as end users, in the context of access charges under Sections 201 and 202; in the context of universal service funding under Section 254; and for purposes of interconnection arrangements under Section 251.

Any other conclusion would also lead to the ILECs having a complete monopoly on links between dial-up ISPs and the public switched network. This would be profoundly unfair to ISPs, who — as intensive users of telecommunications services generally — are otherwise highly desirable as customers. In addition, allowing the ILECs to monopolize the ISPs' essential connections to the public switched network at the same time that the ILECs themselves are trying to enter the ISP market sets the stage for innumerable competitive abuses by the ILECs, abuses which the presence of competition in the local exchange is intended to forestall.

A ruling by the Bureau that calls to and from the Internet are local calls subject to terminating compensation is appropriate — even though the traffic carried on such calls is jurisdictionally interstate due to the nationwide (and worldwide) extent of the Internet — because there is nothing inconsistent about a local call carrying interstate traffic. To the contrary, the

inherently interstate nature of the traffic, and of the Internet itself, provides a sound jurisdictional basis for the Bureau to issue the requested ruling in the first place.

Respectfully submitted,

ADELPHIA COMMUNICATIONS CORPORATION, BENCHMARK COMMUNICATIONS, INC., CENTURY COMMUNICATIONS CORP., DANIELS CABLEVISION, INC., FREDERICK CABLEVISION, INC., GREATER MEDIA, INC., INTERMEDIA PARTNERS, JAMES CABLE PARTNERS, L.P., JONES INTERCABLE, INC., MARCUS CABLE COMPANY, L.P., RIFKIN AND ASSOCIATES, INC., STARSTREAM COMMUNICATIONS, INC., AND WINDKEEPER COMMUNICATIONS, INC.

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Their Attorneys

July 17, 1997

ATTACHMENT A: LETTER FROM BELL ATLANTIC RE: TREATMENT OF TRAFFIC TO ISPS

Bell Atlantic Network Services, Inc. Two Bell Atlantic Plaza 1320 North Court House Road Ninth Floor Arlington, Virginia 22201 703 974-4800 FAX 703 974-6431 Patrick A. Hanley President Carrier Services



July 15, 1997

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Manager, Telephone and Data Services Jones Telecommunications of Virginia, Inc. 617-A South Pickett Street Alexandria, VA 22304

Dear Sir:

This letter addresses an issue that has arisen in the course of the negotiating and implementing interconnection agreements between Bell Atlantic (BA) and CLECs, including the Jones local telecommunications service affiliates in Virginia and Maryland (individually and collectively "Jones"). BA has become aware that some CLECs have included telephone calls handed off to Internet Service Providers (ISPs) for carriage over the Internet in the reciprocal local call compensation and associated interconnection charges that the CLEC bills to BA. BA may have also included some ISP traffic in the local call compensation that it bills to CLECs.

As discussed with Jones' counsel during the course of negotiating the BA/Jones interconnection agreements for Virginia and Maryland, Bell Atlantic believes that it is inconsistent with the terms of the agreements to bill reciprocal compensation for calls made through an ISP. The great majority of calls handed off to an ISP do not terminate at the ISP's local office. Rather, many ISP calls are placed for the purpose of using the ISP as a gateway to another telecommunications network, ie. the Internet, which then carries the call to locations outside the local calling area often across the country or internationally. Telephone calls made to complete a connection over the Internet are not "Local Traffic" within the meaning of the interconnection agreements. In particular, such traffic does not "terminate[] to a Customer of the other Party on that other Party's network, within a given local calling area, or expanded area service ("EAS") area..." as defined in the agreements. Internet access traffic does not terminate either on a "Party's network" nor "within a given local calling area."

Accordingly, BA hereby:

(1) Requests that Jones provide, within 30 days of the date of this letter, a factually-supported estimate of the portion of the traffic, if any, that BA has sent in each of the last two billing months to the Jones interconnection point and which Jones has in turn delivered to an ISP (including any Jones affiliate that is an ISP). Please explain the methodology used by Jones to develop these estimates. BA will also consider any

estimates of traffic that Jones has sent to BA that BA has delivered to an ISP that Jones can provide.

- (2) Provides notice that any traffic delivered by BA to Jones, which Jones delivers to an ISP but seeks reciprocal compensation charges from BA, shall be disputed by BA subject to the dispute procedures contained in the BA/Jones interconnection agreements.
- (3) Agrees to the application of similar disputed amount procedures with respect to any call termination charges that are levied by BA for ISP traffic delivered by Jones to BA, pursuant to the above paragraphs.

You may contact me on (703) 974-4800 with any questions or to discuss this matter further.

Singerely

Vice President and General Counsel
Jones Telecommunications of Virginia, Inc
9697 East Mineral Avenue
Englewood, CO 80112

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